



Substitute for form 14-9 APTO INTELLIGENCE & TRADE PROPERTY OFFICE				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/663,299
(Use as many sheets as necessary)				Filing Date	September 15, 2003
				First Named Inventor	Liu, Haichao
				Art Unit	1621
				Examiner Name	Karl Puttlitz
Sheet	1	of	1	Attorney Docket Number	02307V-139100US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-			
	AB	US-			
	AC	US-			
	AD	US-			
	AE	US-			
	AF	US-			
	AG	US-			
	AH	US-			
	AI	US-			
	AJ	US-			
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	AL	US-			
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	AO	US-			
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FOREIGN PATENT DOCUMENTS						
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)		
KP	AS	JP	H4-222884		03-08-94	Mitsui Toatsu Chemicals, Inc. (English translation)
	AT					
	AU					
	AV					
	AW					

Examiner Signature	/Karl Puttlitz/	Date Considered	01/08/2007
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Substitute for form 1449B/PTO				Complete if Known	
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KP	AA	US-4,149,009	04-10-1979	Yoneoka et al.	
	AB	US-4,216,339	08-05-1980	Couteau et al.	
	AC	US-4,232,171	11-04-1980	Yoneoka et al.	
	AD	US-4,319,037	03-09-1982	Yoneoka	
	AE	US-4,480,122	10-30-1984	Horlenko et al.	
	AF	US-4,613,411	09-23-1986	Hsu et al.	
	AG	US-4,778,923	10-18-1988	Aplin et al.	
	AH	US-4,994,603	02-19-1991	Mueller et al.	
	AI	US-5,026,904	06-25-1991	Lodge et al.	
	AJ	US-5,144,062	09-01-1992	Chen et al.	
	AK	US-5,194,675	03-16-1993	Joerg et al.	
	AL	US-5,223,102	06-29-1993	Fedkiw, Jr. et al.	
	AM	US-5,399,745	03-21-1995	Yoneoka et al.	
	AN	US-5,401,873	03-28-1995	Zehner et al.	
	AO	US-5,770,761	06-23-1998	Lin et al.	
	AP	US-5,840,971	11-24-1998	Gubelmann-Bonneau	
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	AR	US-6,008,399	12-28-1999	Chang et al.	
	AS	US-6,015,875	01-18-2000	Smith, Jr. et al.	
	AT	US-6,232,490 B1	05-15-2001	Palois et al.	
	AU	6,379,507 B1	04-30-2002	Satoh et al.	
	AV	6,399,812 B1	06-04-2002	Yan et al.	
KP	AW	6,447,745 B1	09-10-2002	Feeley et al.	

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NON PATENT LITERATURE DOCUMENTS					
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KP	AX	AI, Mamoru; "The Production of Methyl Formate by the Vapor-Phase Oxidation of Methanol"; <u>Journal of Catalysis</u> 1982, Vol. 77, pp. 279-288.			
KP	AY	HASAN, Masiul et al.; "Oxidation of primary alcohols to aldehydes with oxygen catalysed by tetra-n-propylammonium perruthenate"; <u>Journal of Molecular Catalysis</u> 2002, Vol. 160, pp. 77-84.			

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KP	AZ	JI, Hong-Bing et al.; "Environmentally friendly alcohol oxidation using heterogeneous catalyst in the presence of air at room temperature"; <i>Catalysis Communications</i> 2002, Vol. 3, pp. 511-517.			T ²
	BA	KAKIUCHI, Nobuyuki et al.; "Pd(II)-Hydrotalcite-Catalyzed Oxidation of Alcohols to Aldehydes and Ketones Using Atmospheric Pressure of Air"; <i>J. Org. Chem.</i> 2001, Vol. 66, pp. 6620-6625.			
	BB	LIU, Haichao et al.; "Synthesis of methylformate, dimethoxymethane, formaldehyde, and their mixtures via selective oxidation of methanol on RuO ₂ -based catalysts"; <i>Department of Chemical Engineering, University of California at Berkeley</i> .			
	BC	LOUIS, Catherine et al.; "Catalytic Properties of Silica-Supported Molybdenum Catalysts in Methanol Oxidation: The Influence of Molybdenum Dispersion"; <i>Journal of Catalysis</i> 1998, Vol. 109, pp. 354-366.			
	BD	MALLAT, T. et al.; "Oxidation of alcohols with molecular oxygen on platinum metal catalysts in aqueous solutions"; <i>Catalysis Today</i> 1994, Vol. 19, pp. 247-284.			
	BE	MATSUMOTO, Masakatsu et al.; "Oxidation of Allylic Alcohols to Unsaturated Carbonyl Compounds by Ruthenium Dioxide and Dioxygen/Ruthenium Dioxide"; <i>J. Org. Chem.</i> 1984, Vol. 49, pp. 3435-3436.			
	BF	MATSUSHITA, Tsuyoshi et al.; "Highly efficient oxidation of alcohols and aromatic compounds catalysed by the Ru-Co-Al hydrotalcite in the presence of molecular oxygen"; <i>Chem. Commun.</i> 1999, pp. 265-266.			
	BG	MUSAWIR, Mehdi et al.; "Highly efficient liquid-phase oxidation of primary alcohols to aldehydes with oxygen catalysed by Ru-Co oxide"; <i>Chem. Commun.</i> 2003, pp. 1414-1415.			
	BH	POULSTON, S. et al.; "Aerobic Oxidation of Alcohols with Palladium-Hydrotalcite"; <i>Platinum Metals Rev.</i> 2002, Vol. 46, No. 1, pp. 26.			
	BI	STUCHINSKAYA, Tatiana L. et al.; "Liquid-phase oxidation of alcohols with oxygen catalysed by modified palladium(II) oxide"; <i>Catalysis Communications</i> 2003, Vol. 4, pp. 417-422.			
	BJ	TRONCONI, Enrico et al.; "Methyl Formate from Methanol Oxidation over Coprecipitated V-Ti-O Catalysts"; <i>Ind. Eng. Chem. Res.</i> 1987, Vol. 26, pp. 1269-1275.			
	BK	VALENTE, N. Graciela et al.; "Structure and activity of Sn-Mo-O catalysts: partial oxidation of methanol"; <i>Applied Catalysis</i> 2001, Vol. 205, pp. 201-214.			
	BL	YAMAGUCHI, Kazuya et al.; "Creation of a Monomeric Ru Species on the Surface of Hydroxyapatite as an Efficient Heterogeneous Catalyst for Aerobic Alcohol Oxidation"; <i>J. Am. Chem. Soc.</i> 2000, Vol. 122, pp. 7144-7145.			
	BM	YAMAGUCHI, Kazuya et al.; "Supported Ruthenium Catalyst for the Heterogeneous Oxidation of Alcohols with Molecular Oxygen"; <i>Angew. Chem. Int. Ed.</i> 2002, Vol. 41, No. 23, pp. 4538-4542.			
	BN	YAMAGUCHI, Kazuya et al.; "Efficient Heterogeneous Aerobic Oxidation of Amines by a Supported Ruthenium Catalyst"; <i>Angew. Chem. Int. Ed.</i> 2003, Vol. 42, pp. 1480-1483.			
KP	BO	ZHAN, Bi-Zeng et al.; "Zeolite-Confined Nano-RuO ₂ : A Green, Selective, and Efficient Catalyst for Aerobic Alcohol Oxidation"; <i>J. Am. Chem. Soc.</i> 2003, Vol. 125, pp. 2195-2199.			

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